

*AMENDMENTS TO THE CLAIMS*

This listing of claims replaces all prior versions, and listings, of claims in the application.

1-15. (Canceled).

16. (Currently Amended) A heat-sensitive lithographic printing plate precursor ~~according to claim 15, wherein said coating further comprises a dissolution inhibitor~~ comprising a support having a hydrophilic surface and an oleophilic coating provided on the hydrophilic surface, said coating comprising (i) an infrared light absorbing agent, (ii) a polymer comprising a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure -S-(L)<sub>k</sub>-Q wherein S is covalently bound to a carbon atom of the phenyl group, wherein L is a linking group, k is 0 or 1 and Q comprises a heterocyclic group, and (iii) a dissolution inhibitor, and wherein said precursor is a positive working lithographic printing plate precursor.

17. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 16, wherein said dissolution inhibitor is selected from the group consisting of

an organic compound which comprises at least one aromatic group and a hydrogen bonding site,

a polymer or surfactant comprising siloxane or perfluoroalkyl units and mixtures thereof.

18-20. (Canceled).

21. (Currently Amended) A ~~polymer precursor~~ precursor according to ~~claim 2~~ claim 16 wherein said heterocyclic group contains at least one nitrogen atom in the ring of the heterocyclic group.

22. (Currently Amended) A ~~polymer precursor~~ precursor according to ~~claim 2~~ claim 16 wherein said heterocyclic group has a 5- or 6- membered ring structure, and is optionally annelated with another ring system.

23. (Currently Amended) A ~~polymer precursor~~ according to ~~claim 3~~ claim 21 wherein said heterocyclic group has a 5- or 6- membered ring structure, and is optionally annelated with another ring system.

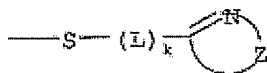
24. (Currently Amended) A ~~polymer precursor~~ according to ~~claim 3~~ claim 16 wherein said heterocyclic group has a 5- or 6- membered ring structure, and is annelated with another ring system.

25. (Currently Amended) A ~~polymer precursor~~ according to ~~claim 24~~ claim 16 wherein the heterocyclic group is selected from an optionally substituted tetrazole, triazole, thiadiazole, oxadiazole, imidazole, benzimidazole, thiazole, benzthiazole, oxazole, benzoxazole, pyrazole, pyrrole, pyrimidine, pyrasine, pyridasine, triazine or pyridine group.

26. (Currently Amended) A ~~polymer precursor~~ according to ~~claim 5~~ claim 16, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

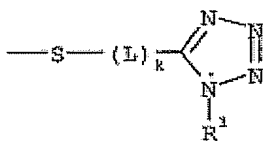
27. (Canceled).

28. (Currently Amended) A heat-sensitive lithographic printing plate precursor according to ~~claim 15~~ claim 16 wherein  $-S-(L)_k-Q$  comprises the following formula



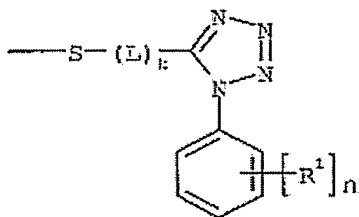
wherein Z represents the necessary atoms to form a 5- or 6- membered heterocyclic aromatic group, and is optionally annelated with another ring system.

29. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein the  $-S-(L)_k-Q$  comprises the following formula



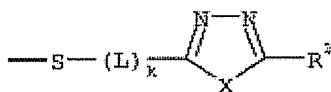
wherein  $R^1$  is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

30. (Currently Amended) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein  $-S-(L)_k-Q$  comprises the following formula



wherein  $n$  is 0, 1, 2, 3, 4 or 5, wherein each  $R^1$  is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $[-SO_2-NH-R, -NH-SO_2-R,]$   $-SO_2-NH-R, -NH-SO_2-R, -CO-NR-R, -NR-CO-R, -NR^2-CO-NR^3-R^4, -NR^2-CS-NR^3-R^4, -NR^2-CO-O-R^3, -O-CO-NR^2-R^3, -O-CO-R^5, -CO-O-R^2, -CO-R^2, -SO_3-R^2, -O-SO_2-R^5, -SO^2-R^2, -SO-R^5, -P(=O)(-O-R^2)(-O-R^3), -O-P(=O)(-O-R^2)(-O-R^3), -NR^2-R^3, -O-R^2, -S-R^2, -CN, -NO_2$  or  $-M-R^2$ , wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms, where in  $R^2$  to  $R^4$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^5$  is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $R^1, R^2, R^3, R^4$  and  $R^5$  together represent the necessary atoms to form a cyclic structure.

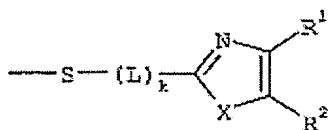
31. (Currently Amended) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein  $-S-(L)_k-Q$  comprises the following formula



wherein  $X$  is  $[[0]]$ ,  $O$ ,  $S$  or  $NR^3$ , wherein  $R$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or  $-L^1-R^2$ , where in  $L^1$  is a linking group, wherein  $R^2$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic,

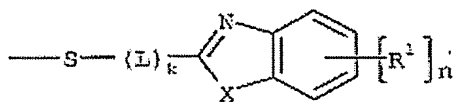
aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN, wherein  $R^3$  is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from  $R^1$ ,  $R^2$  and  $R^3$  represent the necessary atoms to form a cyclic structure.

32. (Currently Amended) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein  $-S-(L)_k-Q$  comprises the following formula



wherein X is O, S or  $NR^4$ , wherein  $R^1$  and  $R^2$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or  $[-L^1-R^3]$   $-L^1-R^3$  wherein  $L^1$  is a linking group, wherein  $R^3$  is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN, wherein  $R^4$  is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  together represent the necessary atoms to form a cyclic structure.

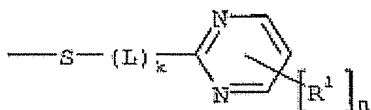
33. (Currently Amended) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein  $-S-(L)_k-Q$  comprises the following formula



wherein n is 0, 1, 2, 3 or 4, wherein X is O, S or  $NR^5$ , wherein each  $R^1$  is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-SO_2-NH-R^2$ ,  $-NH-SO_2-R^6$ ,  $-CO-NR^2-R^3$ ,  $-NR^2-CO-R^6$ ,  $-NR^2-CO-NR^3-R^4$ ,  $-NR^2-CS-NR^3-R^4$ ,  $-NR^2-CO-O-R^3$ ,  $-O-CO-NR^2-R^3$ ,  $-O-CO-R^6$ ,  $-CO-O-R^2$ ,  $-CO-R^2$ ,  $-SO_3-R^2$ ,  $-O-SO_2-R^6$ ,  $-SO_2-R^2$ ,  $-SO-R^6$ ,  $[-P(=O)(-O-R^2)(-O-R^3)]$ ,  $-P(=O)(-O-R^2)(-O-R^3)$ ,  $-O-P(=O)(-O-R^2)(-O-R^3)$ ,

$-\text{NR}^2-\text{R}^3$ ,  $-\text{O}-\text{R}^2$ ,  $-\text{S}-\text{R}^2$ ,  $-\text{CN}$ ,  $-\text{NO}_2$  or  $-\text{M}-\text{R}^2$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $\text{R}^2$  to  $\text{R}^5$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $\text{R}^6$  is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^5$  and  $\text{R}^6$  represent the necessary atoms to form a cyclic structure.

34. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28 wherein  $-\text{S}-(\text{L})_k-\text{Q}$  comprises the following formula



wherein n is 0, 1, 2 or 3, wherein each  $\text{R}^1$  is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-\text{SO}_2-\text{NR}-\text{R}^2$ ,  $-\text{NR}-\text{SO}_2-\text{R}^5$ ,  $-\text{CO}-\text{NR}^2-\text{R}^3$ ,  $-\text{NR}^2-\text{CO}-\text{R}^5$ ,  $-\text{NR}^2-\text{CO}-\text{NR}^3-\text{R}^4$ ,  $-\text{NR}^2-\text{CS}-\text{NR}^3-\text{R}^4$ ,  $-\text{NR}^2-\text{CO}-\text{O}-\text{R}^3$ ,  $-\text{O}-\text{CO}-\text{NR}^2-\text{R}^3$ ,  $-\text{O}-\text{CO}-\text{R}^5$ ,  $-\text{CO}-\text{O}-\text{R}^2$ ,  $-\text{CO}-\text{R}^2$ ,  $-\text{SO}_3-\text{R}^2$ ,  $-\text{O}-\text{SO}_2-\text{R}^5$ ,  $-\text{SO}_2-\text{R}^2$ ,  $-\text{SO}-\text{R}^5$ ,  $-\text{P}(=\text{O})(-\text{O}-\text{R}^2)(-\text{O}-\text{R}^3)$ ,  $-\text{O}-\text{P}(=\text{O})(-\text{O}-\text{R}^2)(-\text{O}-\text{R}^3)$ ,  $-\text{NR}^2-\text{R}^3$ ,  $-\text{O}-\text{R}^2$ ,  $-\text{S}-\text{R}^2$ ,  $-\text{CN}$ ,  $-\text{NO}_2$  or  $-\text{M}-\text{R}^2$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $\text{R}^2$  to  $\text{R}^4$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $\text{R}^5$  is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  together represent the necessary atoms to form a cyclic structure.

35-37. (Canceled).

38. (New) A precursor according to claim 16, wherein said polymer comprising a phenolic monomeric unit is a novolac.